

## Found a Peanut...and it was Rotten

Richard H. Linton, Ph.D.

Professor Food Safety, Purdue University

A joint investigation is currently underway by the U.S. Food and Drug Administration (FDA) and the Centers for Disease Control and Prevention (CDC), for the ongoing foodborne outbreak of illnesses caused by *Salmonella* Typhimurium. As of February 25, 2009, the most recent outbreak of *Salmonella* food poisoning traced to peanut products has been associated with 45 states, sickened 666 people, and linked to nine deaths.

A combination of epidemiological analysis and laboratory testing by state officials in Minnesota and Connecticut, the FDA, and CDC enabled the FDA to confirm that the initial sources of the outbreak were peanut butter and peanut paste produced by the Peanut Corporation of America (PCA) at its Blakely, Georgia, processing plant. Peanut paste is a concentrated product consisting of ground, roasted peanuts that are distributed to food manufacturers to be used as an ingredient in various commercially produced products including cakes, cookies, crackers, and ice cream.

Additional testing has enabled health officials to confirm that peanut butter made from peanuts processed at a Texas plant also contain the same strain of *Salmonella* Typhimurium. These test results offer new evidence that the outbreak attributed to a peanut plant in Georgia may have more than one origin. Both the Texas plant and the Georgia plant were operated by PCA, which filed for bankruptcy amid fallout from the outbreak. Federal authorities have launched a criminal investigation into allegations that the company knowingly shipped tainted food. PCA also faces a growing number of federal lawsuits seeking millions of dollars of damages from victims of the outbreak.

Peanuts are an ingredient in numerous food products, and the contaminated ingredients affected a multitude of products that were distributed through various channels and consumed in an assortment of settings. This "ingredient-driven recall" made by PCA, includes peanut butter and peanut paste which are used as common ingredients in cookies, crackers, cereal, candy, ice cream, pet treats, and other foods. The list of recalled products is exhaustive and continues to rise every day. To date, more than 2,100 products in 17 categories have been voluntarily recalled by more than 200 companies. PCA expanded its recall to include all peanuts and peanut products processed in its Blakely, Georgia, facility since January 1, 2007. The recall includes products that contain the following ingredients: peanut granules, peanut meal, dry roasted peanuts, oil roasted peanuts, peanut butter, and peanut paste.

Members of the retail food industry can identify the products potentially at risk by viewing the FDA's searchable list of recalled peanut products (see website link below). This list is being updated on a regular basis, as information becomes available. FDA is advising retailers to stop selling recalled products and check the recall list and press releases posted on FDA's website frequently to see if any new products have been added to the list. FDA is encouraging foodservice establishments to ensure they are not serving recalled products. All retailers and foodservice establishments should contact their suppliers to confirm the source of their peanut product ingredients. This is not the first outbreak associated with peanut butter and *Salmonella*. In 2007, a large multistate outbreak of *Salmonella* Tennessee occurred after consumption of Peter Pan and Great Value peanut butter. In that outbreak, 628 persons from 47 states were infected with the *Salmonella* bacteria.

Most persons infected with *Salmonella* develop diarrhea, fever, and abdominal cramps within 12 to 72 hours after infection. The illness usually lasts 4 to 7 days, and most persons recover without treatment. However, in some persons the diarrhea may be so severe that the patient needs to be hospitalized. The elderly, infants, and those with impaired immune systems are more likely to have a severe illness.

Additional information on this outbreak and recall procedures may be found at the following websites provided below:

- <http://www.accessdata.fda.gov/scripts/peanutbutterrecall/index.cfm> - searchable list of recalled peanut products
- <http://www.fda.gov/oc/opacom/hottopics/salmonellatyp.html> - FDA website of *Salmonella* Typhimurium outbreak in peanut products
- <http://www.cdc.gov/salmonella/typhimurium/update.html> - CDC website of *Salmonella* Typhimurium outbreak in peanut products
- <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5621a1.htm> - CDC data for 2007 *Salmonella* outbreak in peanut butter
- <http://vm.cfsan.fda.gov/~mow/chap1.html> - information about *Salmonella* from the FDA Bad Bug Book